No. 8800233

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Western Plant Breeders, Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF eighteen YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. THE UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS SPECIFIED BY THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

DURUM WHEAT

'WestBred 883'

In Testimony Whereof, *I have hereunto set my hand and caused the seal of the* Plant Variety Protection Office *to be affixed at the City of* Washington, D. C. *this* 31st *day of* March *in the year of our Lord one thousand nine hundred and* eighty-nine.

Attest:

Kenneth A. Evans
Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Clayton Yeutter
Secretary of Agriculture

APPROVAL EXPIRES 4-30-85

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

FORM APPROVED OMB NO. 0581-0055

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426)

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions on reverse)

1 NAME OF APPLICANT(S)	2 TEMPORARY DESIGNATION	3 VARIETY NAME
WESTERN PLANT BREEDERS, INC.	PH 883-2	WestBred 883

4 ADDRESS (Street and No. or R.F.D. No., City, State, and Zip Code)	5 PHONE (Include area code)
8111 TIMBERLINE DRIVE BOZEMAN, MT. 59715	(406)587-1218

FOR OFFICIAL USE ONLY

PVPO NUMBER: 8800233

6 GENUS AND SPECIES NAME	7. FAMILY NAME (Botanical)
TRITICUM DURUM	GRAMINEAE

8. KIND NAME	9. DATE OF DETERMINATION
DURUM WHEAT	OCTOBER 10, 1985

FILING
DATE: Sept 1, 1988
TIME: 9:45 ☒ A.M. ☐ P.M.

FEES RECEIVED
AMOUNT FOR FILING: $ 1800 00
DATE: Sept. 1, 1988
AMOUNT FOR CERTIFICATE: $ 2000 00
DATE: ~~Sept. 27, 1985~~ Feb. 21, 1989

10. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORGANIZATION (Corporation, partnership, association, etc.)

CORPORATION

11. IF INCORPORATED, GIVE STATE OF INCORPORATION	12. DATE OF INCORPORATION
MARYLAND	SEPT. 27, 1985

13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS

KIM C. SHANTZ
227 SO. SMITH RD. SUITE # 104
TEMPE, AZ. 85281

PHONE (Include area code) (602) 967-0028

14 CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED

a. ☒ Exhibit A. Origin and Breeding History of the Variety *(See Section 52 of the Plant Variety Protection Act.)*
b. ☒ Exhibit B. Novelty Statement.
c. ☒ Exhibit C. Objective Description of Variety *(Request form from Plant Variety Protection Office.)*
d. ☐ Exhibit D. Additional Description of Variety.
e. ☒ Exhibit E. Statement of the Basis of Applicant's Ownership.

15. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? *(See Section 83(a) of the Plant Variety Protection Act.)* ☒ Yes *(If "Yes," answer items 16 and 17 below)* ☐ No

16. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?	17. IF "YES" TO ITEM 16, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED?
☐ Yes ☒ No	☐ Foundation ☐ Registered ☐ Certified

18 DID THE APPLICANT(S) PREVIOUSLY FILE FOR PROTECTION OF THE VARIETY IN THE U.S.?
☐ Yes *(If "Yes," give date)*
☒ No

19 HAS THE VARIETY BEEN RELEASED, OFFERED FOR SALE, OR MARKETED IN THE U.S. OR OTHER COUNTRIES?
☒ Yes *(If "Yes," give names of countries and dates)*: U.S.A., CERTIFIED, DECEMBER 7, 1987
☐ No

20. The applicant(s) declare(s) that a viable sample of basic seeds of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable.

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF APPLICANT	DATE
Kim C. Shantz	8-26-88
SIGNATURE OF APPLICANT	DATE

FORM [illegible]-470 (7-84) (Edition of 3-84 is obsolete.)

8800233

'WESTBRED 883'

14A. ~~PH883-2~~ is a spring durum wheat selected from a Western Plant Breeders generated composite cross designated SDP-80. SDP-80 was generated in 1980 by crossing SDP-79 F_2 plants with 28 lines (screened for yield, semolina color, protein and test weight) and 8 named varieties (WestBred 1000D, Cando, Mexicali, Aldura, Calvin, Yavaros-79, Valnova and Mida). The F_2 plants were hand emasculated and pollen was transferred from the above mentioned lines. One to three crosses were made from each pollinator and no more than 2 crosses were made on any one F_2 plant. The bulked F_1 was grown at Conrad, Montana in the summer of 1980. From the F_2 grown at Phoenix, Arizona in 1981, selected heads were bulked and the resulting F_3 was grown at Phoenix, Arizona in the winter of 1982. Plant selections made from this bulk were screened for strong gluten and were planted as F_4 plots at Phoenix, Arizona in 1983. One plot designated as PH883-2 was harvested in bulk and yield tested in the Desert Durum area in 1984, 1985 and 1986. A plot of PH883-2 was grown at Bozeman, Montana in the summer of 1984. Ninety-six heads were selected from this plot and grown as head rows in Phoenix the winter of 1985. Thirty non-segregating rows were bulked together and were used to seed 1/4 of an acre at Bozeman, Montana in the summer of 1985. The resulting seed was used to plant 10 acres of foundation seed production at Phoenix in 1986. No identifiable variants have been found during the multiplication process. PH883-2 is a stable and uniform cultivar in agronomic appearance and performance across several generations and growing conditions. Agronomic data to support stability is presented in the tables. ~~An official name will be chosen soon and the patent office will be notified.~~

'WESTBRED 883'

14B. ~~PH883-2~~ is a day length insensitive, spring durum wheat with an average height of 34 inches which is 1 inch shorter than Mexicali but 3 inches taller than Aldura. It is most similar in phenotypic appearance to WestBred 881. PH883-2 differs from WestBred 881 in that it is 2 inches taller, it is three to seven days earlier in heading, it has consistently higher test weight, it has a lower incidence of black point, it has higher tolerance to powdery mildew, it has yellow anthers while WestBred 881 has purple anthers, it has no anthocyanin present in the auricles while WestBred 881 does, and has slightly higher sedimentation values. The above comparisons along with the objective description (13C) show PH883-2 to be a novel variety of spring durum wheat.

14E. Western Plant Breeders, Inc. is the employer of the breeder, Kim C. Shantz, and rightfully, therefore, the owner of "PH883-2", "WESTBRED 883".

~~Future name~~

TABLE I

Yield in pounds per acre of PH883-2 and presently grown varieties in Western Plant Breeders' trials in California and Arizona.

Location	Year	PH883-2	WestBred 881	Mexicali	Aldura
Phoenix AZ	1984	7683	7417	8100	8467
	1985	7400	7417	7700	7467
	1986	5187	5311	5125	6655
Yuma, AZ	1984	7013	6435	7700	6683
Casa Grande, AZ	1985	5074	4936	5651	5885
Maricopa, AZ	1986	2870	3010	3407	3290
El Centro, CA	1984	7810	7407	7993	7773
	1985	6831	6264	7560	6615
	1986	4825	4775	5625	5850
Corcoran, CA	1985	7678	7685	7876	7627
Average		6237	6066	6674	6631

TABLE II

Percent protein of PH883-2 and presently grown varieties in Western Plant Breeders trials.

Location	Year	PH883-2	WestBred 881	Mexicali	Aldura
Phoenix, AZ	1984	13.4	13.3	11.3	12.5
	1985	15.0	15.4	13.9	14.6
	1986	13.9	13.8	12.7	13.3
Yuma, AZ	1984	13.6	13.2	11.9	12.8
Casa Grande, AZ	1985	14.2	14.5	13.4	13.1
Maricopa, AZ	1986	15.9	15.9	14.0	14.8
El Centro, CA	1984	13.9	13.1	12.3	13.0
	1985	15.8	16.0	14.4	14.9
	1986	16.7	16.7	14.8	15.5
Corcoran, CA	1985	15.7	15.7	14.2	14.7
Average		14.8	14.8	13.3	13.8

~~PH883-2~~ WESTBRED 883

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TABLE III

Plant height in inches of PH883-2 and presently grown varieties in Western Plant Breeders' trials.

Location	Year	PH883-2	WestBred 881	Mexicali	Aldura
Phoenix, AZ	1984	35	33	36	31
	1985	39	37	36	34
	1986	31	32	34	31
Yuma, AZ	1984	34	32	36	30
Casa Grande, AZ	1985	35	32	37	29
Maricopa, AZ	1986	28	29	30	25
El Centro, CA	1984	32	31	33	28
	1985	38	37	36	36
	1986	--	--	--	--
Corcoran, CA	1985	37	38	39	34
Average		34	33	35	31

TABLE IV

Heading date of PH883-2 and presently grown varieties in Western Plant Breeders' trails.

Location	Year	PH883-2	WestBred 881	Mexicali	Aldura
Phoenix, AZ	1984	3-09	3-16	3-15	3-18
	1985	3-17	3-20	3-19	3-22
	1986	3-04	3-09	3-06	3-14
Casa Grande, AZ	1985	4-08	4-11	4-09	4-14

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TABLE V

Test weight in pounds per bushel of PH883-2 and presently grown varieties in Western Plant Breeders' trials.

Location	Year	PH883-2	WestBred 881	Mexicali	Aldura
Phoenix, AZ	1984	64.4	62.8	63.3	64.0
	1985	63.3	61.6	61.9	63.4
	1986	64.3	63.1	63.2	65.3
Yuma, AZ	1984	64.3	62.6	62.3	63.7
Casa Grande, AZ	1985	63.6	62.6	62.8	63.3
El Centro, CA	1984	63.7	62.0	62.7	63.3
	1985	62.8	61.6	62.6	62.8
	1986	64.7	63.3	64.9	65.5
Cocoran, CA	1985	62.6	61.6	62.7	62.0
Maricopa, AZ	1986	63.8	61.8	63.2	64.0
Average		63.8	62.3	63.0	63.7

TABLE VI

Hard amber vitreous counts of PH883-2 and presently grown varieties in Western Plant Breeders' trials.

Location	Year	PH883-2	WestBred 881	Mexicali	Aldura
Phoenix, AZ	1984	87	92	43	85
Yuma, AZ	1984	81	97	62	88
El Centro, CA	1984	91	95	64	90
Casa Grande, AZ	1985	97	96	86	86
Average		89	95	64	87

TABLE VII

Percent lodging of PH883-2 and presently grown varieties in Western Plant Breeder's trials.

Location	Year	PH883-2	WestBred 881	Mexicali	Aldura
Phoenix, AZ	1985	10	0	40	0
	1986	10	0	20	0
El Centro, CA	1984	60	40	60	20
Cocoran, CA	1985	60	30	20	0

TABLE VIII*

Incidence of Black Point in PH883-2 and presently grown varieties in Western Plant Breeders' trials.

Location	Year	PH883-2	WestBred 881	Mexicali	Aldura
Phoenix, AZ	1984	1.0	3.0	3.0	3.0
Yuma, AZ	1984	1.5	2.0	2.0	3.5
El Centro, CA	1984	2.0	2.5	2.0	4.0

* Subjective visual rating with 0 = None and 5 = Severe

~~PH883-2~~ 'WESTBRED 883' 8800233

TABLE IX*

Semolina color of PH883-2 and presently grown varieties in Western Plant Breeders' Trials.

Location	Year	PH883-2	WestBred 881	Mexicali	Aldura
Phoenix, AZ	1984	1.0	1.0	3.0	1.0
	1985	1.0	1.0	2.0	1.0
	1986	1.0+	1.0	2.2	1.2
Casa Grande, AZ	1985	1.0	1.0	2.0	1.0
Maricopa, AZ	1986	1.0+	1.2	1.5	1.0
El Centro, CA	1984	1.0	1.0	3.0	1.0
	1985	1.0	1.0	2.0	1.0
	1986	1.0	1.0	2.0	2.0
Cocoran, CA	1985	1.0	1.0	2.0	1.0
Average		1.0	1.0	2.2	1.1

*Subjective visual rating with 1=bright yellow color and
5=dull, faint yellow color

TABLE X

Sedimentation values in millimeters of PH883-2 and presently grown varieties in Western Plant Breeders trials.

Location	Year	PH883-2	WestBred 881	Mexicali	Aldura
Phoenix, AZ	1984	26	25	21	18
	1985	33	30	26	22
	1986	35	34	28	21
Casa Grande, AZ	1985	31	28	25	23
Maricopa, AZ	1986	28	28	28	21
El Centro, CA	1984	26	25	22	17
	1985	37	34	25	23
	1986	42	40	29	22
Cocoran, CA	1985	33	40	28	24
Average		32	32	26	21

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~~PH883-2~~ 'WESTBRED 883'

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TABLE XI*

Powdery mildew tolerance of PH883-2 and presently grown varieties in Western Plant Breeders' trials.

Location	Year	PH883-2	WestBred Turbo	Mexicali	Aldura
El Centro, CA	1984	1.5	3.0	2.0	3.5
	1985	1.0	2.5	1.5	3.0

*1 = No incidence
9 = Plant covered to the tip of the awns

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FORM APPROVED: OMB NO. 0581-0055

EXHIBIT C
(Wheat)

U. S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK, MEAT, GRAIN AND SEED DIVISION
BELTSVILLE, MARYLAND 20785

OBJECTIVE DESCRIPTION OF VARIETY
WHEAT (*TRITICUM SPP.*)

INSTRUCTIONS: *See Reverse.*

NAME OF APPLICANT(S)
Western Plant Breeders

ADDRESS (*Street and No. or R.F.D. No., City, State, and ZIP Code*)
8111 TIMBERLINE DRIVE
BOZEMAN, MT. 59715

FOR OFFICIAL USE ONLY

PVPO NUMBER
8800233

VARIETY NAME OR TEMPORARY DESIGNATION
~~PH883-2~~ WESTBRED 883

Place the appropriate number that describes the varietal character of this variety in the boxes below.
Place a zero in first box (e.g. [0][8][9] or [0][9]) when number is either 99 or less or 9 or less.

1. KIND:

[2] 1 = COMMON 2 = DURUM 3 = EMMER 4 = SPELT 5 = POLISH 6 = POULARD 7 = CLUB

2. TYPE:

[1] 1 = SPRING 2 = WINTER 3 = OTHER (*Specify*) _____ [2] 1 = SOFT 2 = HARD 3 = OTHER (*Specify*) _____

[3] 1 = WHITE 2 = RED 3 = OTHER (*Specify*) Amber

3. SEASON - NUMBER OF DAYS FROM EMERGENCE TO:

[1][0][3] FIRST FLOWERING [1][1][3] LAST FLOWERING

4. MATURITY (*50% Flowering*):

[2][1] NO. OF DAYS *EARLIER* THAN ..... [6] 1 = ARTHUR 2 = SCOUT 3 = CHRIS

[ ][ ] NO. OF DAYS *LATER* THAN ...None..... [ ] 4 = LEMHI 5 = NUGAINES 6 = LEEDS

5. PLANT HEIGHT (*From soil level to top of head*):

[ ][8][6] CM. HIGH

[0][8] CM. TALLER THAN ..... [7] 7 = Aldura

[3][6] CM. SHORTER THAN ..... [6] 1 = ARTHUR 2 = SCOUT 3 = CHRIS 4 = LEMHI 5 = NUGAINES 6 = LEEDS

6. PLANT COLOR AT BOOTING (*See reverse*):

[1] 1 = YELLOW GREEN 2 = GREEN 3 = BLUE GREEN

7. ANTHER COLOR:

[1] 1 = YELLOW 2 = PURPLE

8. STEM:

[1] Anthocyanin: 1 = ABSENT 2 = PRESENT

[2] Waxy bloom: 1 = ABSENT 2 = PRESENT

[2] Hairiness of last internode of rachis: 1 = ABSENT 2 = PRESENT

[1] Internodes: 1 = HOLLOW 2 = SOLID

[0][4] NO. OF NODES (*Originating from node above ground*)

[1][5] CM. INTERNODE LENGTH BETWEEN FLAG LEAF AND LEAF BELOW

9. AURICLES:

[1] Anthocyanin: 1 = ABSENT 2 = PRESENT

[2] Hairiness: 1 = ABSENT 2 = PRESENT

10. LEAF:

[1] Flag leaf at booting stage: 1 = ERECT 2 = RECURVED 3 = OTHER (*Specify*): _____

[1] Flag leaf: 1 = NOT TWISTED 2 = TWISTED

[1] Hairs of first leaf sheath: 1 = ABSENT 2 = PRESENT

[2] Waxy bloom of flag leaf sheath: 1 = ABSENT 2 = PRESENT

[1][6] MM. LEAF WIDTH (*First leaf below flag leaf*)

[2][7] CM. LEAF LENGTH (*First leaf below flag leaf*):

FORM LMGS 470-6 (6-82) (Formerly Form LPGS 470-6 (3-79), which may be used)

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2C 9/1/88 PH883-2 'WESTBRED 883' 8800233 3

11. HEAD:

[2] Density: 1 = LAX 2 = DENSE

[2] Shape: 1 = TAPERING 2 = STRAP 3 = CLAVATE 4 = OTHER (Specify) _____

[4] Awnedness: 1 = AWNLESS 2 = APICALLY AWNLETED 3 = AWNLETED 4 = AWNED

[1] Color at maturity: 1 = WHITE 2 = YELLOW 3 = PINK 4 = RED 5 = BROWN 6 = BLACK 7 = OTHER (Specify): _____

[0][7] CM. LENGTH [1][5] MM. WIDTH

12. GLUMES AT MATURITY:

[3] Length: 1 = SHORT (CA. 7 mm.) 2 = MEDIUM (CA. 8 mm.) 3 = LONG (CA. 9 mm.)

[3] Width: 1 = NARROW (CA. 3 mm.) 2 = MEDIUM (CA. 3.5 mm.) 3 = WIDE (CA. 4 mm.)

[4] Shoulder shape: 1 = WANTING 2 = OBLIQUE 3 = ROUNDED 4 = SQUARE 5 = ELEVATED 6 = APICULATE

[3] Beak: 1 = OBTUSE 2 = ACUTE 3 = ACUMINATE

13. COLEOPTILE COLOR:

[1] 1 = WHITE 2 = RED 3 = PURPLE

14. SEEDLING ANTHOCYANIN:

[1] 1 = ABSENT 2 = PRESENT

15. JUVENILE PLANT GROWTH HABIT:

[3] 1 = PROSTRATE 2 = SEMI-ERECT 3 = ERECT

16. SEED:

[3] Shape: 1 = OVATE 2 = OVAL 3 = ELLIPTICAL

[1] Cheek: 1 = ROUNDED 2 = ANGULAR

[1] Brush: 1 = SHORT 2 = MEDIUM 3 = LONG

[1] Brush: 1 = NOT COLLARED 2 = COLLARED

[ ] Phenol reaction (See instructions): 1 = IVORY 2 = FAWN 3 = LT. BROWN 4 = BROWN 5 = BLACK

[2] Color: 1 = WHITE 2 = AMBER 3 = RED 4 = PURPLE 5 = OTHER (Specify) _____

[0][9] MM. LENGTH [0][3] MM. WIDTH [5][0] GM. PER 1000 SEEDS

17. SEED CREASE:

[1] Width: 1 = 60% OR LESS OF KERNEL 'WINOKA' 2 = 80% OR LESS OF KERNEL 'CHRIS' 3 = NEARLY AS WIDE AS KERNEL 'LEMHI'

[1] Depth: 1 = 20% OR LESS OF KERNEL 'SCOUT' 2 = 35% OR LESS OF KERNEL 'CHRIS' 3 = 50% OR LESS OF KERNEL 'LEMHI'

18. DISEASE: (0 = Not Tested, 1 = Susceptible, 2 = Resistant)

[0] STEM RUST (Races) _____ [0] LEAF RUST (Races) _____ [0] STRIPE RUST (Races) _____ [0] LOOSE SMUT

[2] POWDERY MILDEW [0] BUNT [ ] OTHER (Specify) _____

19. INSECT: (0 = Not Tested, 1 = Susceptible, 2 = Resistant)

[0] SAWFLY [1] APHID (Bydv.) [0] GREEN BUG [0] CEREAL LEAF BEETLE

[0] OTHER (Specify) _____ HESSIAN FLY RACES: [0] GP [0] A [0] B [0] C [0] D [0] E [0] F [0] G

20. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED:

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant tillering	WestBred 881	Seed size	WestBred 881
Leaf size	" "	Seed shape	" "
Leaf color	" "	Coleoptile elongation	" "
Leaf carriage	" "	Seedling pigmentation	" "

INSTRUCTIONS

GENERAL: The following publications may be used as a reference aid for the standardization of terms and procedures for completing this form:

(a) L.W. Briggle and L. P. Reitz, 1963, Classification of Triticum Species and Wheat Varieties Grown in the United States, Technical Bulletin 1278, United States Department of Agriculture.

(b) W.E. Walls, 1965, A Standardized Phenol Method for Testing Wheat Seeds for Varietal Purity, contribution No. 28 to the handbook of seed testing prepared by the Association of Official Seed Analysts. (See attachment.)

LEAF COLOR: Nickerson's or any recognized color fan should be used to determine the leaf color of the described variety.